

THOUGH it appears to be an astronaut guiding his spacecraft above a rugged moonscape, it's really Dennis Ghiglia (2644) examining a three-dimensional image of a ferritin molecule on the TV screen. Dennis designed and runs the image processing facility which manipulates multidimensional signals, interpreting them as pictures.

### Image Processing: Making Pictures By the Numbers

Image processing was born of the space age. It is the means by which the Voyager spacecraft transmitted their stunning pictures of Jupiter and Saturn over millions of miles back to Earth.

"Image processing is the science and art of manipulating multidimensional signals so that they can be interpreted as pictures," sayd Dennis Ghiglia of Distributed Processing System Design Division 2644. "The images recorded by a camera —as in the Voyager spacecraft—are expressed as an array of numbers which can be reconstructed by a computer into a picture. Or in the case of the Very Large Array near Socorro, extraterrestrial radio signals are converted into images. In other words, the subject—whether a galaxy or a supernova—didn't exist as a prior picture, only as raw data or radio signals."

Dennis runs the image processing facility where this technology is being put to work on many Sandia research projects.

"The groundwork for our facility was

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SANDIA NATIONAL LABORATORIES • ALBUQUERQUE NEW MEXICO • LIVERMORE CALIFORNIA • TONOPAH NEVADA

### **High Temperature Borehole Viewer Passes Tests**

During well drilling operations, it is sometimes desirable to be able to examine visually the walls of the borehold in order to locate fractures and other anomalies in the hole. For this purpose, a device called an acoustic borehole televiewer is commonly used in oil and gas wells. Temperatures in these wells are usually low, but such is not the case with geothermal wells, and it was found that the conventional borehole televiewer does not function in the high temperatures and pressures associated with geothermal wells. Now, an improved acoustic borehole televiewer has been tested by Sandia and has successfully passed these tests.

During tests at Sandia and Wyle Labs, the tool performed at the design goals of 275°C and 5000 psi for four hours. In other field tests at geothermal research sites in northern New Mexico, the tool operated reliably for four hours at depths of more than 8850 feet where temperatures of 200°C and pressures of 4500 psi were reached. The original borehole televiewer, patented by Mobil and manufactured by Simplec, has been used to provide acoustic images of the borehole wall in low temperature oil and gas wells. Sandia is working with the manufacturer and users to modify the televiewer so that it can

operate in high temperatures. A commercial device incorporating this technology will ultimately be available.

The televiewer emits bursts of acoustic energy (1500 pulses/second at 1.3 MHz) from a rotating transducer as it is pulled up the borehole. The energy travels through an acoustic window, hits the borehole wall, and is reflected back to the transducer.

The time required for pulses to return to the transducer and the amplitude of these reflections are recorded and processed on the surface, yielding a black-and-white picture of the wall. Light areas represent smooth surfaces; dark zones represent rough surfaces or fractures.

"Knowing the location of fractures in a

way," says Heard, project leader.

Materials used for the transducer, the acoustic absorber to which the transducer is bonded, and the acoustic window have all been changed. The downhole electronics package has been redesigned, and its coupling to rotating components in the acoustic sensor housing has been improved.

The acoustic transducer, a disc of lithium niobate electroded on both faces, is bonded to an absorber of tungsten-loaded alumina cement that eliminates acoustic energy emitted toward the tool's interior.

Lithium niobate remains stable over a temperature range from below 0°C to at least 280°C, a marked improvement over the range of the ceramic lead metaniobate used in the original televiewer. The new transducer assembly has a much longer design life than the original, as does the Teflon acoustic window. A system of three rotating transformer sets replaces the carbon brushes riding on rotating silver slip rings previously used to connect the rotating components in the acoustic sensor housing to the stationary electronics package.

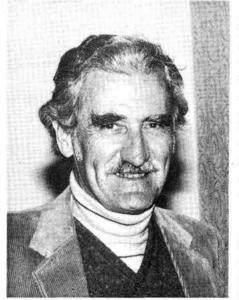
geothermal reservoir is a key to energy recovery because productivity is determined primarily by the extent to which the wellbore intersects the fracture system," says Fred Heard of Geothermal Technology Development Division 4741.

"One of the best ways to determine this is with a borehole televiewer. However, units developed for oil and gas operations cannot function in the hot, corrosive geothermal environment."

Sandia's work, begun about three years ago, has resulted in "more than 50 percent of the original tool being altered in some This Sandia-designed transformer system, now being made and marketed by

[Continued on Page Five]

# Afterthoughts



I'm retiring. Age 57. I've checked the dollars and, with pension plan and BSSP, I'll receive not a great deal less than I take home now after the confiscatory sweep of taxes and Social Security. The hard decision, though, is not the economic one but, rather, that to cut the cord with a community with which I've been intimately involved for 28 years. The prospect intimidates. Still, it would be no less intimidating at age 65 or 70, and I want to enjoy my new life while I still have the bloom of youth (some of it, anyway).

But what will you do? friends ask. Have you ever heard of the measure of an educated person? It's one, so the answer goes, who can (a) entertain a new idea, (b) entertain another person and

(c) entertain himself. It strikes me that these measures apply as well in looking at self in retirement.

I'll do lots of things. Writing and photography (on biking, motorcycling, fitness, skiing, New Mexico, nuclear power). I'll get my speaking Spanish up to speed (travel in Mexico and South America). Adobe (walls and other modest construction projects with my carpenter son). Classical music (may take up piano). The South 14 Project. And I'll pursue my love affair with New Mexico, my best of all possible places.

In a career, certain people become involved with you, by design or by accident, and turn out to be, well, pivotal. I'd like to cite and thank my certain people. Howard Stump, my close friend who induced me to come to New Mexico. Max Linn, who gave me a job at Sandia and a lesson in management (get good people, leave 'em alone). Bill Smith, who rescued me at a low point in my Sandia career. Walt Troy, who introduced me to the Base gym and physical fitness in 1960. Bill Carstens, who took a flyer and promoted me. Tom Heaphy, who recommended me for my best-ever job as editor. Ted Sherwin, my boss these last 13 years--he's conservative, I'm liberal, on average we were a good team. John Hornbeck, our first president to open his office to LAB NEWS; and thanks, John, for getting BSSP for Sandia. The LAB NEWS staff: in all candor, we turn out the best paper in the Bell System and a few other systems besides. And Paige, my wife, whose TLC and skill in management of me and household make it possible for me to leave the Labs at this early age.

I resolved that this would not be maudlin but, at the close, the poignant words of the old gaucho in that Argentine tango came to mind: Adios Muchachos, compañeros de mi vida...



\* \* \*

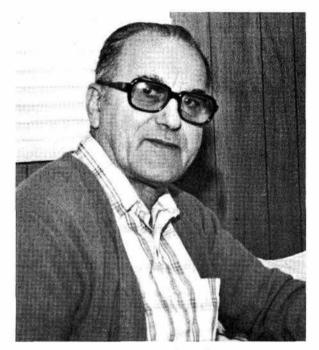
Meanwhile, back at the ranch, I'd like to introduce your new editor: Bruce Hawkinson. He's a familiar name to many, having been on the LAB NEWS, or associated with it, for seven years during the '70s.

Bruce arrived on the Sandia scene in 1965 from teaching at the Univ. of Wisconsin. He had previously taken his masters, in English, from the Univ. of Kansas. His work here has generally been in one or another aspect of writing, though he spent a year (1968) as a super-

### Livermore Retirees



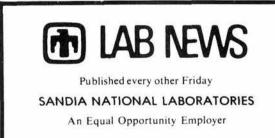
Tom Takahashi (1132)



Lou Reis (8414)

### Take Note

Pat Driscoll (8335) recently captured first place playing racquetball in the Women's Class A advanced division of the Amador Valley Athletic Club Ladder Tournament. Pat has been playing for six years.



visor in Sandia's vouchering organization. He also spent two years (1970-1972) on a leave of absence with HEW's Office of Education in Washington, D.C. Sandia Livermore was another assignment, and he served there as resi-

dent LAB NEWS writer and public relations person from '77 to '79. Most recently, Bruce has been a writer-director in the Motion Picture Division 3153.

Bruce likes to bike, to ski and to add additions to his home in Sandia Park. Lynda, his wife, shares these pursuits. But his real and passionate hobby is language, and I give you fair warning: he is a relentless punster.

With that, welcome aboard Bruce ...

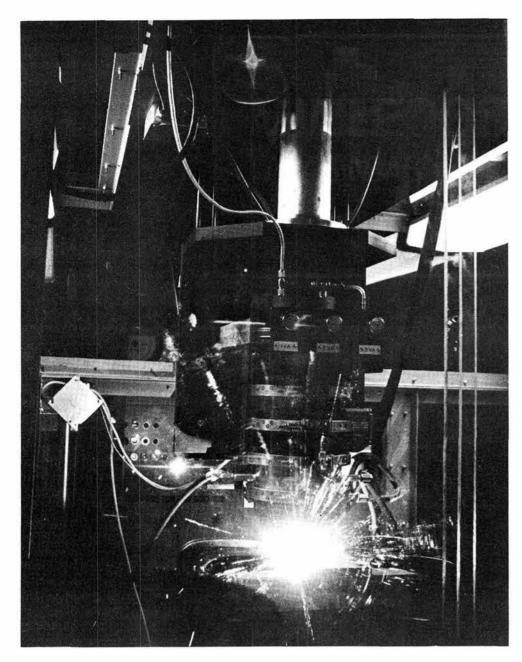
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ALBUQUERQUE, NEW MEXICO LIVERMORE, CALIFORNIA TONOPAH, NEVADA Editorial offices in Albuquerque, N.M. Area 505 844-1053 FTS 844-1053 ZIP 87185 In Livermore Area 415 422-2447 FTS 532-2447

john shunny is editor & don graham ass<sup>\*</sup>t. editor

carl mora & norma taylor write louis erne does picture work aided by gerse martinez

barry schrader reports livermore.







THIS NEW LASER is now operational in Lou Tallerico's Joining Model Laboratory Division 8415. The 5000-watt Spectra-Physics 975 CO2 laser provides a high density heat source for cutting, drilling, welding, surface heat treatment and chemistry modifications. It is capable of cutting and drilling all known materials ranging from plastics to tungsten. A powerful and versatile laboratory tool, the laser is the basis for a number of upcoming welding and material surface modification studies. In top photo, Wes Estill and Don Dubose adjust the optical elbow that turns the enclosed beam (originating in the 8000-lb.

vacuum tank and cavity at left) 90 degrees through the floor to the focusing mechanism below where Steve Malene makes adjustments. Other photo shows the beam at work on a stainless steel plate.

#### Heads NCGA

## Labs Doc Plays Golf, Officiates

Dr. John Rhodenbaugh, physician-incharge of Sandia Livermore Medical, is currently serving as president of the Northern California Golf Association (NCGA), a 66,000-member organization that stretches from San Luis Obispo north to the Oregon border.

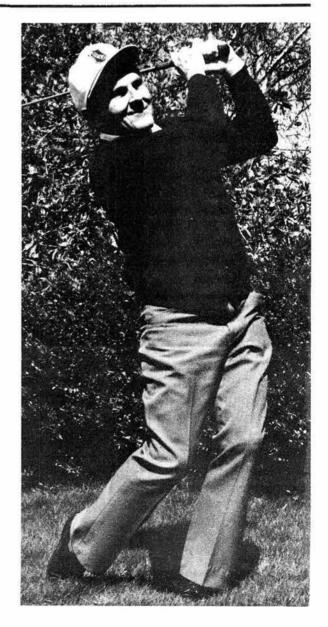
An avid golfer, Dr. Rhodenbaugh has been active in the golf association since 1970 when one of his sons was in the junior golf program. His son was a member of the Amador High School (Pleasanton) golf team and was so good he "embarrassed his father into taking some golf lessons . . ." The doctor's volunteer service on the NCGA board over the years has included running several tournaments and officiating at others. He even took a 10-session course at San Jose State on the "Rules of Golf," but feels the "only rule in golf should be 'tee it up and knock it in the hole." His 10 to 12 average handicap doesn't make him a tournament golfer-"you need an under-five handicap to play competitively." He finds the outdoor aspects of golf attractive, admitting, though, that the game has little real exercise potential compared to a sport like swimming. Nonetheless, he does see in it a high personal challenge factor for enthusiasts. "There are two kinds of people who play golf-young and old," the doctor explains. "Youngsters who are athletically inclined

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find that golf is a game they will enjoy all their lives. Then there are the men like myself who enjoy the social and fresh air benefits." Golf is one of the few sports where people of all skill levels can play together and actually have a competitive game due to the handicap system, he points out.

Dr. Rhodenbaugh's biggest thrill in the sport came three years back when his family gave him his birthday present: a plane ticket for a golfer's dream vacation in Scotland. His golf-playing son accompanied him, and they played 19 rounds of golf in 14 days on some of the world's most historic courses, including the "Old Course" at St. Andrews. "When you're Catholic you go to Rome, but when a golfer you go to Scotland," he quips. The Scots fostered golf from its beginning, and playing there now is like taking a leisurely walk by the seaside. Back here, he's been able to play the famous Wing Foot and Pine Valley courses in New York State, and the other thrill for golfers on the West Coast-the Olympic in San Francisco and Cypress Point along the Seventeen Mile Drive at Monterey. So next time you visit Medical at Livermore and hear a "Fore!" as you enter, don't open the door to that long hallway too quickly . . .



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# **Image Processing**

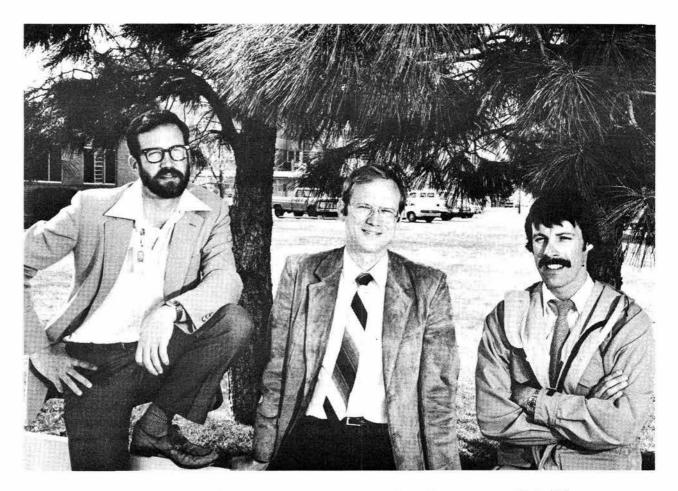
established in the mid 1970s," he tells us. "The electron beam fusion group was using image processing for their diagnostic work. The only facility in this area was at Los Alamos, and taking the work up there was cumbersome as well as wasteful in time and money. Sandia decided it should have its own image processing capability. After consulting with different organizations, the need was established and it was decided to develop a centralized facility where stateof-the art equipment, image processing algorithms and programs, and consulting could be provided for use Labs-wide.

"We did a lengthy equipment and procurement survey and acquired the equipment on the basis of competitive bids.

"The image processing facility has been in operation for a year and a half. Its image processing system can perform over 250 basic image processing operations including contrast manipulation, pseudo coloring, filtering, and image editing at real-time interactive rates. We can also produce a digital loop movie—putting together still pictures to create motion."

The facility also has an array processor to perform mathematical operations on arrays of numbers. Its computational speed is 20 to 100 times faster than the VAX computer to which it's connected. "It's like a miniature CRAY in a cabinet," says Dennis. "The array processor is on loan to us from UNM's Department of Physics and Astronomy. We intend to support the processing of radiotelescope data from the VLA as part of a collaborative effort.

"Among other equipment we have is a TV camera that converts any picture into raw data so a new image can be composed and enhanced," he continues. "For instance, you might have a blurred picture to some extent we can 'back out' the degradation and make the image sharper. We also have a photographic capability which permits us to reproduce a TV image in a black and white print, color print, or slide."



JACK WEBB (2340), PACE VANDEVENDER (4260), and DAVE ALDRICH (4415)

#### Supervisory Appointments

DAVE ALDRICH to supervisor of Safety and Environmental Studies Division 4415, effective Feb. 1.

Since coming to Sandia four years ago, Dave has worked in Fuel Cycle Risk Analysis Division 4413. His newly created division is concerned with safety and environmental aspects of the nuclear fuel cycle.

Dave earned a BS in civil engineering and his MS and PhD in nuclear engineering, all from MIT. He is a member of the American Nuclear Society, the American Association for the Advancement of Science and the Society for Risk Analysis. Dave enjoys hiking, camping and yachting. He lives in NE Albuquerque.

PACE VANDEVENDER to manager of Pulsed Power Research Department 4260,



effective March 16.

Pace received his BS in physics from Vanderbilt University and his MS in solid state physics from Dartmouth. He was awarded a Marshall Scholarship to the Imperial College of Science and Technology at the University of London, where he received a PhD in physics. While working toward his doctorate in England, Pace became aware of and followed Sandia's work in inertial confinement fusion. He joined the Labs in 1974 as a physicist in the pulsed power research and development organization. He is continuing this work in his newly created department.

Pace is a member of the American Physical Society and Amnesty International. His primary interest off the job is working on the problems of handicapped workers. Currently, he is preparing a pamphlet, in conjunction with his church, discussing head and spinal cord injuries, the victims of these injuries and their families. He and his wife Nancy have three children and live in the NE heights.

JACK WEBB to manager of Radar and Fuzes Department 2340, effective March 16.

LOOKS like Congressman Manuel Lujan likes what he hears from Bruce Bell of Semiconductor Processing

Division 2141. He and President Dacey donned the white oversuits in order to tour the Semiconductor Lab, where dust particles get a chilly welcome. Later, Mr. Lujan visited the machine shops in Bldg. 840. Since coming to the Labs in 1969, Jack has worked on exploratory radar development projects. He was named supervisor of Exploratory Radar Development Division 2345 in 1979. Among other projects in past years, Jack's division has helped develop the radar fuze for the B83 and has done early development of the radar to be used in the arming and fuzing system of the MX. Jack received his BS and MS from MIT. Before entering college, he served four years in the Air Force. He is a senior member of IEEE and is an amateur radio operator. Jack and his wife Margaret have three children and live in Cedar Crest.

### Colloquium **Describes Alien** Atmospheres

A recent colloquium featured Don Jennings from NASA/Goddard Space Flight Center discussing the latest developments in the study of molecules in the solar system. Says Jennings: "Molecular spectroscopy of planetary atmospheres has been given a big boost by the Voyager missions."

Both Voyager spacecraft included among their instrumentation an interferometer spectrometer which provided new details on the atmospheres of the giant gas planets and their satellites. "For instance, Saturn's moon Titan is too small for its atmosphere to be analyzed from Earth," says Jennings. "The Voyager flybys gave us the first detailed spectrum of Titan-the only moon in the solar system known to have an atmosphere."

Images of Titan sent back by Voyager cameras revealed a frigid world whose surface features are hidden by a hazy, orange-colored nitrogen atmosphere. Voyager 1, however, detected exotic trace species such as diacetylene and cyanogen. Computer color enhancement brought out more detail-some banding and a dark ring around the north pole, which is where the most complicated chemistry occurs. Close-ups of Titan's rim show wispy blue aerosol clouds above the nitrogen clouds. Long considered the solar system's largest moon, Titan's diameter, it is now known, was being enhanced by its thick atmosphere. That honor has now devolved on Jupiter's moon, Ganymede.

Spectra of planets and other solar system objects are taken in the infrared range by either spacecraft or ground-based telescopes. Components of the spectra are then matched with laboratory-produced spectra of known chemicals.

The space shuttle program will initiate a new era in molecular spectroscopy, Jennings concluded. "Extended observations made from above the distorting effects of Earth's atmosphere will significantly expand our knowledge of extraterrestrial molecular structures in the solar system."

#### Paper Receives Award

A paper presented by Ron Iman (1223) and W. J. Conover (Texas Tech), "A Distribution-Free Approach to Inducing Rank Correlation Among Input Variables," was chosen as runner-up from 95 papers presented in the section on Physical and Engineering Sciences at the annual meeting of the American Statistical Association. This is the fourth paper by Ron to receive an award in the last three years.



DICK BASSETT (2564), our resident promoter of electric vehicles, is getting this one readied for service with DOE/ALO. The car, an Electrica 007 modified from a Dodge Omni by Jet Industries of Austin, has just completed a two-year evaluation trial at Ft. Belvoir. Dick headed a similar project here with an Electrovan. The 007, powered by a 70 hp electric motor and 15 advanced-design lead acid batteries, has a top speed of 60 mph and a range of 35 to 45 miles. It can be recharged overnight from a standard 230 volt outlet (the same as for an electric clothes dryer). The vehicle will be maintained by Sandia's motor pool. Dick has built and operates two electric vehicles of his own.



ORDINARILY, LAB NEWS doesn't report moonlighting interests of employees, but when Sam Griego (1473) told us he had a chauffeur's uniform to match his '63 Bentley-Rolls, we were curious. We've carried items before about Sam's restoration work on his dozen classic, antique and customized vehicles. This Bentley, the prize of the collection, is expensive to maintain . . . so now Albuquerque has Sam's Limousine Service. Sam says it includes a smile and a snappy salute.

#### **Continued from Page One**

# **Borehole Viewer Passes Test**

Ceramic Magnetics, uses a ferrite core thermal drilling applications, the new divided into rotating (rotor) and stationary (stator) halves. As the inner rotor spins, energy is coupled magnetically across an air gap between the rotor and stator. Several changes have also been made in the electronics, including use of printed circuits that reduce board size by 50 percent, eliminate cross-talk, improve reliability, and simplify fabrication and repair. The circuitry is also more temperature stable, and a new, more sensitive magnetometer circuit is smaller and uses less power.

televiewer may also be useful in oil and gas drilling in deep, hot reservoirs or in hard, fractured formations. Other possible uses include cased-hole inspection to view perforations, damage, and corrosion and open-hole inspection to locate and view washouts and lost circulation zones where drilling fluid has been lost. Televiewer researchers are now concentrating on developing techniques to identify the geometry of lost circulation zones. Such zones occur frequently during drilling in hard, fractured rock and can lead to loss of the entire well.

#### **Paper Presented**

R. L. Iman (1223), "Statistical Methods for Uncertainty Analysis and Sensitivity Analysis Associated with Computer Models," Waste Management '82, March 10. Tucson.

While specifically designed for geo-

# The Greek Islands, Egypt & The Nile

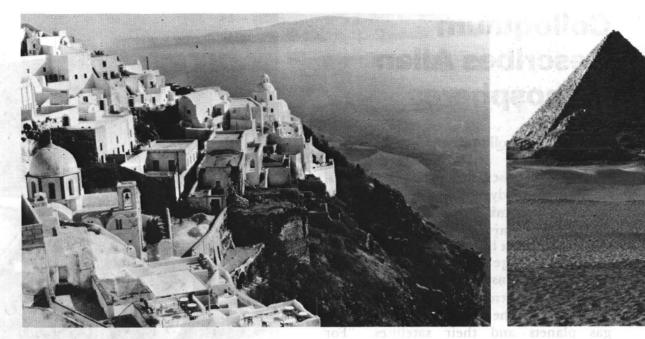
[Have you taken an unusual vacation? Call us about it -4-1053.]

Last summer, before attending a scientific conference in Paris, Roger (5811) and Dody Clough stepped back into the timelessness of the eastern Mediterranean. They spent a few days visiting the Greek islands and then took a boat tour up the Nile River to see Egyptian antiquities.

"We toured the Greek islands by ferryboat," Roger tells us. "They're very barren, with little towns of whitewashed houses and narrow, winding streets perched on cliffs overlooking the sea. The islands are a great place to relax-slow paced, very pleasant, with inexpensive, good restaurants and friendly people.

"One island, Santorini, had an active volcano amost 4000 years ago. It erupted and blew away two thirds of the island along with a good part of Minoan civilization and left a crescent-shaped fragment of the island. Later, the volcano rose up again through the water in the center of the bay surrounded by the semicircular remains of the original island. It is still occasionally active and earthquakes frequently rock the island.

"The island has no water; villagers have it shipped in for bathing, not drinking. Santorini is planted in grapevines and lots



THERA on the island of Santorini in the Greek Islands. Village is perched on cliffs overlooking the sea.

of inexpensive wine is available. A town dating back to Minoan times is being excavated. Although it was destroyed by the earthquake and resulting tidal wave, no remains of survivors have been found. This has led archaeologists to believe that the inhabitants may have been killed by the tidal wave.

"Delos is a tiny island that's used as an outdoor museum. It's covered with ruins of temples, pillars, mosaics, and underground reservoirs. The Greeks believed it was the birthplace of Apollo. A ferry goes to Delos in the morning and leaves at sunset."

Egypt was quite a change of pace. Not only is it a country of great historical



significance but also of "incredible" crowding, traffic, and poverty.

College of Nursing.

"Not a relaxing place," says Roger. "Someone's always trying to sell you something. You hear bakshish a lot-it means 'alms'-being amid that kind of poverty is a sobering experience.

"Dody and I went to the Cheops pyramid-the major one. It's right near a Cairo suburb. We climbed inside, up a narrow passageway which opened into a high-ceilinged chamber leading to a burial room. The stone sarcophagus was the only thing left-the tomb was looted many centuries ago. We were also fortunate to see the Tutankhamen exhibit, now back in the national museum in Cairo.

"Our hotel restaurant served only continental cuisine and we wanted to try Egyptian dishes. I talked with the bellboys who were pleased we wanted to go to an Egyptian restaurant. They flagged down a cab and told the driver where to take us. After the cabbie dropped us off, Dody and I wandered around narrow back streets asking directions in English which nobody understood. It turned out the cab let us off a half mile from the restaurant. Finally there, we had *falafel*-fried bean balls. Also bean paste flavored with spices which you dip pita-type bread into. The main course was roast pigeon washed down with mango juice. The cost of all this was about \$2. Taxis are cheap even though they charge foreigners three times the regular fare.

"We flew from Cairo to Aswan and took the boat down the Nile to Luxor (the ancient city of Thebes) near the Valley of the Kings. The boats, which are operated by international hotel chains, stop along the river for tours to temples and other points of interest. The cruise takes five days and four nights. The accommodations are air-conditioned and the upper deck is the dining section with tables assigned for the duration of the trip. We shared our table with a friendly couple with three kids. The man was quite well informed on the region and with reason-he turned out to be Ted Koppel of ABC's 'Night Line' program.

"All antiquities are well preserved. A typical temple is a series of courtyards surrounded by columns covered with hieroglyphics. In Sakkara-the ancient

capital-we were led to underground tombs by guides in tunics carrying kerosene lamps. The scene made me feel like an archaeologist in an old mystery movie. The tour guides were proud of their cultural and historical heritage and their enthusiasm was catching.

Roger points out that Egypt is just beginning to develop its tourist industry. Cairo is a city of contrasts-wide boulevards filled with motor vehicles interspersed with horsedrawn carts and an occasional camel, the skyline punctuated with the minarets of the city's many mosques. Many Egyptians observe traditional dress, wearing ankle-length night shirts and small turbans; married women dress in black. The military is much in evidence (Roger and Dody were there before the assassination of President Anwar Sadat); in front of important buildings in Cairo you'd see a couple of soldiers with automatic weapons. The Nile is polluted yet people bathe in it and drink its water; many houses along the river are made with sun-dried bricks of mud and straw-Egyptian adobe. "A touch of home," says Roger.

from."

included meals and guided tours.



TEMPLE at Luxor. This was the city know in antiquity as Thebes



THE GREAT Pyramids of Gizeh form an impressive backdrop for Roger (5811) and Dody Clough—she atop the "ship of the desert." Dody teaches at UNM's

"Egypt is a desert," Roger continues. "The land is lush and cultivated a mile or two on either side of the Nile. Where irrigation stops, it looks like the moon-an absolute wasteland where nothing grows and there's no hint of animal life. Ninety percent of the population lives along the river. Egyptians are generally friendly to Americans-once in a while someone would call out to us asking where we were

Logistics: Roger and Dody arranged the Nile tour through a travel agent in Albuquerque. The cost was \$650 for two people for five days and four nights. This

Publishing a worldwide newspaper can have its semantic hazards. Even given the inter-national acceptance of English as the mother tongue of business, Emhart Corporation's U.K.-based constituents sharply criticized the colloquialisms and American journalese in the monthly newspaper, Emhart News. Rebutting, in a piece on English English, the editors point out that there are bramble thickets in contemporary English, too. After all, what American would welcome an invitation to a bun-fight (cocktail party)? Or want to go to a bean-fest with bangers and baps (a picnic serving sausages

- The Ragan Report

## **Upon Retiring: Options With BSSP** & SSP Need Close Study

#### by Ted Sherwin

Last time we discussed the problems of making the retirement decision. Let's say you've decided to make the big leap and have given notice. You're a month or two away from turning in your badge, we'll assume. The first thing you should do, if you haven't already, is to head for Employee Benefits to get a poop sheet on the termination routine. There are a lot of things to do on the last day, but there are several things you should start on immediately. One of the most important concerns payment options for the Bell System Savings Plan or the Savings & Security Plan.

Before you go to Payroll to sign the Form SN-1018, which indicates how you want the savings distributed to you, you should talk with the Benefits people to find out the tax implications of the various options. The Benefits people are not permitted to give tax advice, but they will provide you with complete plan information on the tax alternatives that apply to each type of payout option. As far as Payroll is concerned, you elect either to take your settlement in one payment or in annual installments (up to 20). But you need to know how much of your savings will be taxable, and in what category-regular income or capital gains.

Since your Savings Plan proceeds may leave you with a fairly large tax liability in the first year (assuming you take a lump sum settlement, as I did), you will want to look into the pros and cons of the special 10-year income averaging method (IRS Form 4972, plus instructions). You will certainly want to check out the guidelines for a little known IRA plan available to retirees, whereby part of the proceeds of the savings plans may be "rolled over"reinvested-to continue to earn interest and not be taxed until you start drawing the principal as a supplement to your income, at about age 70. In effect, this defers your tax on the proceeds of your savings which you rollover and the interest on the new investment until a time in your life when you'll probably have a smaller tax liability.

Talk also to an IRA counselor at the Credit Union (or other institution), as I did. You'll get a 30-minute briefing that is well worthwhile, even if you decide not to go the IRA route. One complicating factor for me was that my Savings Plan proceeds would include some AT&T stock as well as cash from the Guaranteed Interest and Equity Portfolio investments.

As I learned at the Credit Union, they cannot accept shares of stock in an IRA transaction. This means I would have to sell some or all of my stock if the cash portion of my distribution is less than the maximum amount I am permitted to roll over-assuming I wished to go the maximum route (you may roll over less than the maximum at your option). Of course, you could also invest in a rollover IRA offered by an investment firm and

they will handle the stock sale as part of the transaction.

It's important to remember that you must complete the rollover transaction within 60 days after receiving your Savings Plan distribution, in order to retain the tax advantage. You'll have plenty of time to make up your mind, however, as the proceeds of the Savings Plan will not be paid to you until about 45 to 60 days after your termination date.

While you are at the Credit Union you'll learn about the wage earner's IRA, if you haven't already, whereby you may invest \$2000 on your own, or \$2250 if you have a non-working spouse, and the amount (and interest earned on it) will not be taxed until you take it out, not later than age  $70\frac{1}{2}$ . This is an especially good deal for retiring employees who are 591/2 or older, because the Credit Union invests your IRA money in two-and-a-half-year Treasury Bills at the current rate, and you can go to the Credit Union and have the certificate reissued anytime the interest rate goes higher than you are currently receiving.

By now it is no secret that Benefits' Vern Henning has talked himself into following some of his own good advice and will be retiring the end of April. The good news is that Eleanor Kelly, a long-time co-worker of Vern's, and inventor of the million dollar smile, will succeed him as counselor for retirees. Vern will be missed, but he says he won't be far away.

Another piece of good news is that the Technical Library has, as promised, come up with an excellent retirement planning bibliography. Walter Roose has compiled a list of a dozen excellent books of recent vintage which are available through the Albuquerque Public Library. His list, available at Benefits or the Library, gives enough information on each of the books to determine whether or not you'd be interested. These books are of particular interest to people thinking about retirement, but many of them will be of interest to retirees as well.

Send your comments and suggestions for what you'd like to hear about in this column. Write to me in care of the Lab News.

### **Events Calendar**

- April 2-4\*-Albuquerque Civic Light Opera, "West Side Story," 8:15 p.m., \*2:15 p.m. only, Popejoy.
- April 5-Audubon Wildlife Series film, "Galapagos," 7:30 p.m., Popejoy.
- April 7-"Holy Week: Colonial and Modern Spain," illustrated lecture, 8 p.m., Maxwell Museum.
- April 9-10-NM Symphony Orchestra with guest pianist Alicia de Larrocha, 8:15 p.m., Popejoy.
- April 9-11, 16-18, 23-25, 30, May 1-2-"Stevie" by Hugh Whitemore, 8 p.m., Sun. matinee 2:30, Easter Sunday, 8 p.m. only; Vortex Theatre, 20041/2 Central SE, 247-8600.

### Fun & Games

Kayaking—This class will start Monday, April 5, and includes additional sessions on the 7th, 12th and 14th at an indoor pool; then there will be a weekend outing, April 17 & 18, where you put your learning to the test. Jack O'Neil, the instructor, provides the kayaks, paddles, helmets, etc., along with a bundle of experience in whitewater kayaking. Cost is \$75. Contact: Tom Lenz at 4-8486.

\*

*Exercise to music*—A class in this starts Monday, April 5, at the gym and continues on Mondays and Fridays for four weeks. Instructor is Mary Selph and, it says, the class meets "at convenient hours." Contact Mary on 296-4137.

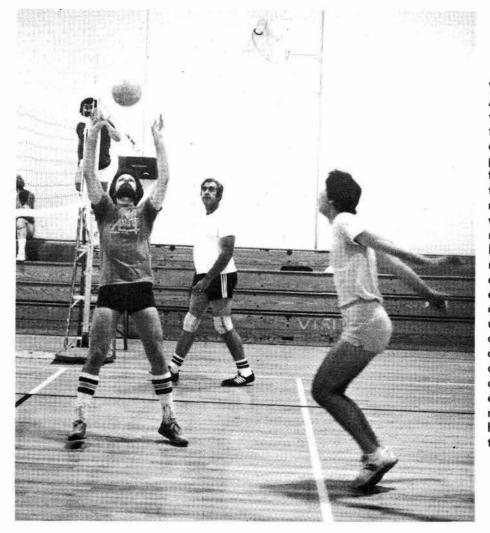
k \*

Motorcycling—"Mountain View '82," a motorcycle rally and poker run is set for Sunday, April 4, at 9 a.m. on Main St. at the State Fairgrounds. It's sponsored by the Gold Wing Riders Assn. Displays, prizes and performance by the Kirtland Dust Devils. Profits are being donated to charity.

\* \* \*

Running—Two items: the New Mexico Track Club is conducting its annual membership drive, aiming at those interested in running, jogging or walking. The club sponsors, among other events, the annual Tour of Albuquerque marathon. Chuck Atencio (3435) tells us dues are \$10/year. Contact him on 247-8738 or Jim Apodaca on 884-3235 for further information.

And Pete Richards (5151) sends us the manic schedule of a group of mountain runners called "Liquipac." These do courses like the 14-mile ascent of Pikes Peak, the 19-mile Lake Peak & Santa Fe Baldy run, and the 30-mile Telluride Get High Event with a vertical climb of 8900 feet. Their description of the runs makes interesting reading: "The time it takes . . . will be longer than what it takes you to run a flat marathon. Trails are rocky and the hills are steep . . . the trail completely disappears and you have to orient yourself



VOLLEYBALL play starts April 19, and Larry Azevedo (5152) informs us that two leagues are being organized. If you wish to play more competitively, then you'll want to be in the "A" league. Get your name to Larry and teams will be formed by drawing names randomly. The "B' league is aimed chiefly at recreation; you form your own team, minimum of eight, and Larry will then arrange the game schedule. In either league, the cost per player is \$8. Sandians, DOEans and their dependents as well as certain contractors are eligible. Larry needs your name or team by April 9 he's on 4-3947. Incidentally, the teams are coed.

using a topo map. You may . . . run through snow, mud and ice cold streams. Falling down . . . a distinct possibility. Sunburn, dehydration, and multiple scratches . . . no aid stations and you're on your own to get back . . . sign a waiver prior to starting. If this . . . does not appeal to you – THEN STAY AWAY." Gee – where do I sign up? LAB NEWS has the schedule.

Table tennis—In the recent Labs team tournament, first place was taken by the team of Tom Barger (1522), Jim Gosler (2636), Juan Abeita (2451) and Rudy Armijo (2523). Second place team included Vic Smith (contr.), Carter Kidd (3417), Ingrid Yates (dep.) and Tommy Barreras (2451).

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Camping & hiking—The American Camping Assn. is sponsoring "Hiking Trails of the Sandias," a course that covers equipment, clothing, food, map and compass, and trail exploration. There's one in-town session, Apr. 29 from 7 to 9 p.m. and three sessions on the trails, May 1, 8 and 15. Cost is \$15/person, \$30/ family. Contact: Shirley Sallach, 298-5366.

\*

Corporate Cup—We're still looking for some high jumpers, male and female, for the Corporate Cup, May 22 and 23. If you and the kangaroo would hit it off, then call Rich Cernosek on 4-8739 for the practice schedule.

#### Congratulations

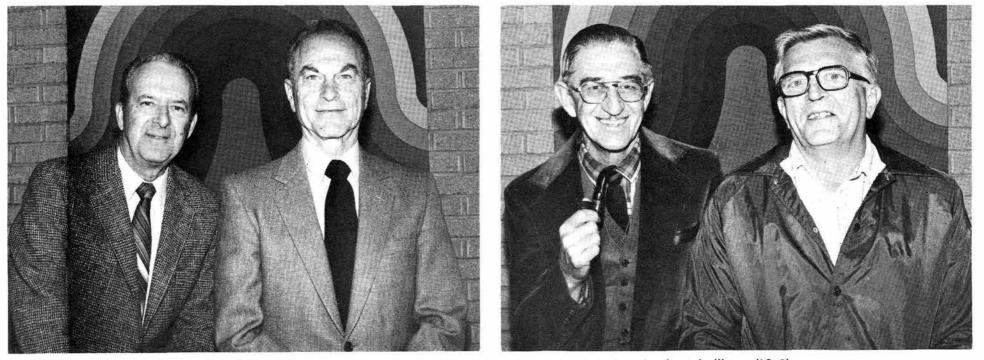
Ken (4421) and Cindy Boldt, a daughter, Laura Anne, March 16.

David (4452) and Janelle Vehar, a son, Jonathan Lee, March 12.

Becky (1734) and Jeff Hunter, a daughter, Janese, Jan. 29.

William (1473) and Kathy Morgan, a daughter, Emily Ruth, March 19.

Tim Ellena (2113) and Linnea Stark, married March 21 in Fresno, Calif.



RETIRING—Leo Bressan (2552), Howard Sander (2121), Art Porter (3417) and Mike Schellhase (1243).

### Take Note

UNM's Division of Continuing Education is again presenting a National Solar Water Heater Workshop. The two-session workshop consists of a lecture on April 17 and a kit assembly on May 15 (the two-panel kit is \$980, three-panel is \$1327). Cost of the workshop is \$75. Contact: 277-6542.

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The "First Annual Pub Jump" to benefit the Albuquerque Opera Theater is slated for Thursday, April 15, and runs from 6 to midnight. As for format, the flyer states: "Enjoy the fine food, drinks and entertainment at any or all of the night spots on our Pub Jump route, with continual bus service provided between them . . . Ticket price (\$10) includes entertainment, bus, and \$2 in scrip money so you have a drink on ACT." Call 298-0881 for more information or to sign up.

\* \* \*

If you get the clutches at the prospect, then consider joining forces with the Toastmasters, a group that embraces public speaking the way Mean Joe Greene hugs the opposing quarterback. They'll meet on April 7 from 12 noon to 1 p.m. at the Coronado Club, and their speechcraft seminar lasts for eight weeks. More information, 4-0338.

\* \*

Retiring this week and not shown in LAB NEWS photos are Robert Kutarnia (4331), Basilio Villescas (3613), Salvatore Mattina (1212), Ray Clark (3000) and Gordon McClure (4242).

\* \* \*

Cochiti Lake, currently designated a "no wake" lake, is the subject of a proposal to open a portion of it to speedboating. A public hearing is scheduled on the



JIM KING, director of Electronic Systems 2300, is a collector of photographic memorabilia and shares them this month with a display in Bldg. 802. Jim, a photographer since his early teens, became a collector in the '60s specializing in Daguerreotypes, stereoptican devices and thermoplastic cases (developed in the mid-1800s to display the early photographic images on copper plates). Joe Laval (3163), Chuck Cockelreas (400) and Mike Michnovicz (2432) helped mount the display.

proposal, and it takes place April 21 at 7 p.m. in the County Courthouse, 505 Central.

\* \* \*

Attention Retirees: The annual retiree picnic at Sandia Albuquerque is scheduled for May 27. Invitations will be mailed to all retirees later this month.

\* \* \*

The Sandia Sudzers is an organization promoting the art and science of brewing good beer. Jim VanDenAvyle (5822) and Al Beattie (1552), the only Sandians in the 40-member club, are looking for company. The monthly meetings feature a speaker and a technical discussion on brewing techniques. Brew tastings are popular; the judging includes commercial beer as well as home brew. Anyone interested can give Jim or Al a call. Ever been to Cabezon? The ghost town, not the hat-shaped mountain that you see off to the west as you drive north to Cuba. The town is one of some two dozen ghost towns in New Mexico described in Haunted Highways, a book published by the UNM Press and now carried (along with Guide to New Mexico Mountains and New Mexico Place Names) in the book collection of the South Hwy. 14 Village Project. The book on ghost towns is \$8.99 and can be examined at the LAB NEWS trailer next to Bldg. 814.

Mexican Folk Retablos, 19th Century Religious Art on Tin is the title of an art show running through April at the Adobe Gallery in Old Town. A kind of folk art, the retablos on display were collected in Mexico by John DuRant, an American who lived in San Miguel de Allende in Mexico. Gallery hours are 10 to 6 during the week, 11 to 6 on Sundays.

The Sanado Woman's Club meets Tuesday, April 13, at the NCO Club East

and will hear vocalist Frances Robertson, who is featured on the program. Social hour begins at 12:30, the luncheon is at 1, and the vocalist program starts at 1:30. Reservations by April 7: Carolyn on 266-9927 or Maurine on 299-8765.

DEPUTY Undersecretary and Assistant Secretary for Fossil Energy Jan Mares (right) visited in March for briefings on Labs weapon and energy programs. He also toured the Central Receiver Test Facility and



Nuevo México, Sí has been making a splash lately and is extending its run. The drama is in English, and it tells the story of 400 years of New Mexico history through drama, song and dance. La Compañía de Teatro de Alburquerque (that's the way they spell it) is the sponsor and their theater is at 3211 Central NE. Tickets are \$4; call 256-7164 or 266-3770.

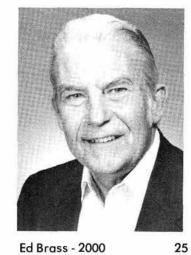
is shown here with Don Schueler, manager of Solar Energy Department 4720, as the Power Tower glows in the background.

\* \* \*

Another dramatic group, the Vortex Theatre, is presenting *Stevie*, a play based on the life and writings of British poet Stevie Smith, Friday through Sundays, April 9 through May 2. Sundays are at 2:30; the other performances are at 8.

# **MILEPOSTS** LAB NEWS

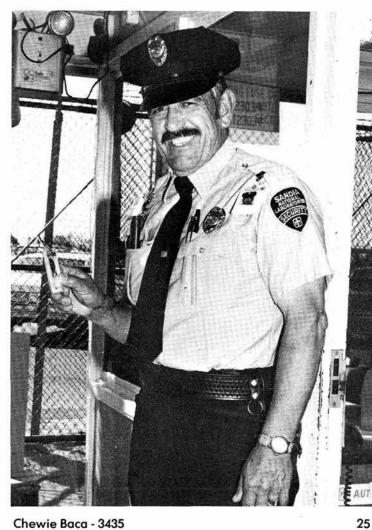
**APRIL 1982** 





Ed Brass - 2000

Mike Silva - 3612



Chewie Baca - 3435



Milt Bailey - 2363

Jeff Kluck - 1242



Gerry Yonas - 4200

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Wynona Sexson - 4444 15



Art Kellom - 8461

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25



Helen Gaither - 3252



Tom Zudick - 3155

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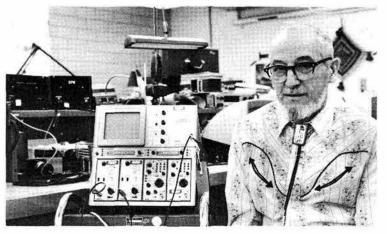
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Dick Hosley - 2631



John Crawford - 2500 20



25

Glen Corbett - 1485





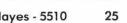
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Gerald Hastings - 2433



Earl Morris - 1424

Dennis Hayes - 5510 15



Clara Blasyk - 3733



30



#### Favorite Old Photo

We call this Mom's first wedding, conducted in 1920. Mom is second from right, next to her solemn-looking groom. They were 15. It turns out that everyone in the picture is female, including the "minister" performing the service. Seems the girls from the neighboring farms were having a boring summer, so Grandma donated some old curtains for the gowns while Grandpa loaned his suits. The locale was Fargo, Oklahoma. Mom and Dad live today in Raton and among their children are Dorothy Hall (3500) and me, Vernon Marsh (2433).

#### JUNK•GOODIES•TRASH•ANTIQUES•KLUNKERS•CREAM PUFFS•HOUSES•HOVELS•LOST•FOUND•WANTED•& THINGS

#### CLASSIFIED ADVERTISING

Deadline: Friday noon prior to week of publication unless changed by holi-day. Mail to: Div. 3162 (M0125).

#### RULES

- 1. Limit 20 words.
- One ad per issue per category.
- Submit in writing. No phone-ins. Use home telephone numbers.
- For active and retired Sandians and
- DOE employees. No commercial ads, please.
- No more than two insertions of
- same ad. Include name & organization.
- Housing listed here for rent or sale is available for occupancy without regard to race, creed, color, or national origin.

#### MISCELLANEOUS

- SANDIA T-shirts & caps, \$6; 2 fluorescent safety vests, \$3 ea.; folders of 8 Remington prints, 6 Russell prints, \$3 ea. S. Hwy. 14 Village Project. LAB NEWS (trailer near Bldg. 814).
- ELECTRIC oven, rangetop & hood, coppertone, \$125, will accept offers on components. Magnani, 299-8693.
- LUDWIG Acrolite snare drum, case, practice pad & stand, \$110. Schwoebel, 298-4295.
- BLACK Shelty cross, free to good home. Berman, 296-5640.
- TIRES, Michelin steel belted radials, R.V., 8.75x16.5, less than 19,000 miles, \$300 for 6 ea. Martinez, 821-8692.
- B1C multiple play turntable, belt drive, model 920, dust cover, wood base, \$49. Paul, 299-6387.
- WOOD, round dining table, \$50. Jacobs, 265-4385. OVEN, built-in double, electric, Sears
- Lady Kenmore, coppertone, fits 24"x40" opening, \$125. Verardo, 255-6385.
- ONE BFG HR78-15 Trailmaker radial snow tire, buy or sell. Curry, 884-
- LOWREY ORGAN, model M152 Pageant, nearly new, \$3500. Coffin,
- TYPEWRITER, port. w/case, manual Smith-Corona, \$50. Lynch, 298-7817. LAWN MOWER, Wards, 20" side discharge, w/3.5 HP B/S engine, used 2 summers, cost \$156, sell for

- TYPEWRITER, IBM elec., w/variable spacing, \$100. Sutherland, 345-1183. 71 PONTIAC SERVICE manual & 71
- Fisher body service manual, \$15. Taylor, 294-5300. SIDEBAND CB, Realistic TRC448, 40-
- channel, \$100; girl's 20" bike, Sears, \$35. Erni, 268-1721. GOLF CLUBS, youth age 9-13, left
- handed, 2 woods, putter, 4 irons, bag & cart, \$35. Connor, 268-9497. CAMPER SHELL for 8' bed truck. Baca, 877-1136.
- PORTABLE dishwasher; trundle bed; GE washer; 2 garage doors, 15' frostfree freezer; dinette w/6 chairs. Hansen, 898-3544.
- VAN or pickup seats, high back, brown velour w/pedestal, 2/\$225; rear windown panes from '78 Chev. van, 2/\$50. Ripi, 884-4683 after 5. 25' MOTOR HOME, self-contained,
- w/Mercury engine (rebuilt), rebuilt generator. Campbell or Gunter, 298-7783 or 296-6613. CAMPER, Bethany pop-up, sleeps
- 6, gas/elec. refrig., furnace, range, sink, dual/auto propane, vinyl can-vas, used 6 times, \$3150. Holmes, 292-0898
- CAR STEREO, Pioneer 8-track, AM, FM, \$45. Shull, 265-6286. SWING SET, Sears, includes slide,
- galvanized, Abel, 296-6089. SUNBEAM outdoor gas grill, dual burner, on wheels, new in '80, \$100; home water softener, \$100.
- Schroeder, 344-1011. TREES: cottonless cottonwood, 1" to 4" diameter, up to 18' high, \$10 per inch diameter. Sparks, 898-1252 weekends only.
- **GERMAN SHEPHERD DOGS, show** quality female, 8 wks., on co-ownership or outright sale; males, 8 months & 11/2 yrs., \$300. Kramm, 281-5379.
- AVON & BEAM BOTTLES; cameras, old radios; Noritake china; 3-spd., 5-spd., & 10-spd. bicycles; furni-ture, other misc. Cox, 293-5518.
- SEARS child's seat for adult bicycle, fits over rear wheel. Harrigan, 266-4143.
- COMBINATION storm & screen door, white Cross-Buck, 36" door, hinged on right, new in package, \$50. Bartlett, 299-4861.
- COMPUTER S-100 system, 48K memory, 8" dual-disk drive, Centronics printer, manuals, documen-
- tation. Holloway, 298-2874. REFRIGERATOR, Coldspot; GE refrig.; gas range; women's ski equip.: 5' skis and bindings, 6M boots, M mittens, goggles, 44" Pritchard, 299-3543. poles.
- FUR COAT, dark brown mouton lamb, small (32, 34), worn twice, cost \$1200 new, sell for \$950. Ruvolo, 296-1316
- WINDOWS, steel casement, 6x3, \$25;

- BUFFET clarinet, King tenor saxophone; 2 twin beds, 2 chests of drawers, \$100. Kepler, 298-5652. 48" 4 H LOOM, 20-30 cones, Pendle-
- ton wool. Southwick, 281-3782. BROWN SOFA & matching chair, \$125; Sears Kenmore sewing machine, 30 stitches, cabinet, buttonholer, recently serviced, \$150. Shortencarier, 292-3575.
- PHILCO upright frostfree freezer, 16 cu. ft., \$200. Amole, 299-1788.
- MEAT COOLER, approx. 8'x8' w/5-ton cooler. Miller, 873-3450. FURNITURE: black vinyl sofa & chair,
- both for \$85; dark wood coffee table, \$45. Luikens, 884-1172. GARDEN: Nelson oscillating sprinkler,
- 4 Champion pop-up sprinklers, thatch aerator (mower attachment), gladiola bulbs, garden fencing, trash bags. Bailey, 294-4218.
- SCHOBER concert organ w/full pedal clavier, bench, separate speaker, reverbatape, & music lamp, \$2000. Bateman, 298-9502.
- ORGAN, mahogany Hammond church model, tone cabinet, \$1200; 2 rust corduroy velvet swivel rockers, \$50 ea., \$90 pair. Biffle, 293-7043.
- METAL puppy pen, \$20; 2 small animal air shipping crates, \$10 ea.; 1-door gate, \$5. Marder, 268-9643.
- MEDITERRANEAN bedroom set: triple dresser, chest, 2 night tables, headboard, frame & queen mattress
- set. Ratzel, 821-6368 after 6. WEBER GRILL, 22½", \$20; charcoal, 10 lb., \$1; heatolater w/blower, \$20; fp screen, \$5; microwave build-in
- kit, \$5. Miyoshi, 821-9118. NIKON FM Nikkor lens, \$215. Passman, 821-4999.
- WATER SOFTENER, Lindsay, manual, timer, uses approx. 30 lbs. of salt/ mo., \$70. Stang, 256-7793.
- CARPET, rust tweed shag, pad, approx. 110 yards., 4 rooms, \$3/yd. single pieces, \$2.50/yd. all. Meyer, 296-9066.
- COUCH and matching chair, early American, brown Herculon, \$125. Bagley, 821-8247 evenings.

#### TRANSPORTATION

- 18'3" BOAT, 1970 Larson tri-hull, open bow, 1/0 165 HP Merccruiser, tan-dem axle trailer, full canvas &
- equip., \$4250. Bradley, 298-2263. 75 DATSUN B-210, AT, AC, \$1800. Copass, 296-4296.
- 13' CATAMARAN sailboat w/new boom, mast & sail; custom trailer w/Buddy wheels. Harrison, 883-5411 after 6.
- '81 KAWASAKI 440 LTD, shield, case savers, \$1400. Fox, 299-9031.

- 75 KAWASAKI Z1 900cc, 16,000 miles, new tires, custom seat, adjustable backrest & rack, \$1595. Parriott, 292-0204
- 76 HONDA 550 Super Sport, Goldwing seat, windshield, crash bars, back-rest, new tires, \$995. Weirick, 281-1462
- 75 PONTIAC Gran LeMans SW, one owner, 59,500 miles, most options,
- \$1850. Bornhoft, 821-7182. '66 CHEV. SW, 283 V8, o-drive, PS, PB,
- AC, other extras, overhauled engine, \$700. Walter, 884-4282.
  '80 DATSUN 200SX, 5-spd., AM/FM/cass., 25/36 mpg, 30,000 miles, 45500 Mollow 205 2000 \$5700. Molina, 265-2292.
- 77 MOTORCYCLE, KZ 400 Kawasaki, 13,000 miles, many extras, \$1050.
- Miller, 299-6067. MOTORCYCLE, BMW R-100/7 fairing, luggage rack, mags, saddlebags, Pirelli tires, new battery, S-W shocks, much more. Hesch, 294-3298.
- 70 PONTIAC LeMans, AT, PS, AC, \$795 or make offer. Eckelmeyer, 296-2148.
- 79 FORD Mustang, 6-cyl., AT, PS, PB, AC, AM/FM/8TK, new tires. Carter, 296-8709.
- 73 SUZUKI GT250 w/windscreen, low mileage, helmet, tool kit & repair
- books, \$350. McCornack, 296-3936. 78 SUZUKI GS 550E, 4-cyl., 6-spd., black, cast wheels, lugg, rack, 10K miles, 57/50 mpg, \$1350. Schmale,
- 293-0784 after April 6. 77 PONTIAC Astre, new radial T/A's & mags, new racing stripe, 28,000 miles, 4-cyl., good mileage. Moyer, 881-0754.
- 74 HONDA CB360, 11.6K miles, elec. start, shield, rack, 2 helmets, repair manuals, new tires, \$750. Bateman, 298-9502.
- KAYAK, Phoenix Savage w/spray skirt kit, wet suit vest, helmet & float bags, all for \$400. Luikens, 881-1382.
- 72 VW pop-top camper, rebuilt engine, new starter, clutch & shocks, AM-FM cassette, \$3300. Craft, 266-0064
- '66 VOLVO stn. wgn. model 122S, 4-cyl. engine, 4-spd. trans., radials, radio, \$985/best offer. Nelson, 265-7482
- FORD Fairlane 302V8, AT, PS, needs body work, \$550. Stang, 256-7793. '81 MAZDA GLC hatchback, low
- mileage, front wheel drive, \$4550, white w/blue interior. Tischhauser,
- 265-0476. '81 YAMAHA Virago, 750 cc, shaft drive, 6000 miles, \$2695 or best offer. Abbin, 296-7678 or 883-8665
- RALEIGH 10-speed Grande Prix, 21" frame, low mileage, w/lock & chain, pump, \$200. Shunny, 265-1620.

- LOT at Angel Fire: yearly country club privileges, tennis, fishing, golf,
- ski season pass, all included, approx. \$6500. Monette, 345-0404. 12x60 2-BDR. M/H, set up Four Hills
- family, W/D hookup, refrig., stove, disposal, best offer. Prusak, 298-7782
- MOUNTAIN LAND, 113 acres, thick Ponderosa cover, 19.2 miles south of I-40, 4 miles on dirt road. Bushnell, 298-9631.
- CONDOMINIUM, 1-bdr., LR, FR, Ig. closet, carpet, drapes, 840 sq. ft., Sandia Plaza, \$40,000, 12% owner financed, Stuart, 299-9190.

#### WANTED

- SUMMER faculty member at Sandia would like to rent furnished house from June 13 to July 31. Curro,
- 867-2471. WHEEL for Ford pickup, 5-hole, 15". Hall. 298-8617.
- SEPT. 1980 issue of Softside magazine to copy or keep. Hole, 294-8723. DODGE or Plymouth car or truck w/bad 318 cubic engine. Prevender,
- 299-5253. SHOP MANUAL for '76 Audi 100 LS.
- Goodwin, 294-6702. RETIRED Sandian to live in own mobile home on large nearby mountain acreage. No cost, except to be caretaker. Causey, 881-7534.
- SOMEONE going to Missouri, near St. Charles, anytime, willing to take furniture item (approx. 6 cu. ft.) to relative. Hitchcock, 294-5153.
- POWER reel-type lawn mower in any condition. Lobitz, 821-1509. ELECTRONIC-hydraulic brake control-

ler for trailer; trailer stabilizing jack stands; 7" chrome baby moon hub caps. VanDenAvyle, 898-6474.

GOOD used first baseman's baseball

LIFEGUARDS and instructors wanted

for summer work at Coronado Club,

WSI required; also basketroom/

patio position. Tom Lenz, Rec.

BOYS' bicycle for 12-yr.-old. Harri-gan, 266-4143.

BABY playpen, used, in good con-dition. Warpinski, 884-8791.

SLIDE for in-ground swimming pool. Kerschen, 821-2848.

ADIES CAPE. O'Nell, 892-6754.

268-9049.

Mgr., 4-8486.

glove or trap, adult size. O'Bryant,

avelko, 296 3346. \$35; 8½ x4, \$50; kitchen sink '79 TRIUMPH Spitfire, roadster DATSUN air conditioner, complete, w/fixtures, \$10; bathroom lavatory headers, rollbar, new Continental **REAL ESTATE** should fit L-series engines w/o air pump, \$150; Starduster CB w/fixtures, \$5. Miller, 299-6067. 733i tires, new top, car cover in-BUNK BENDS w/shelf headboards, WORK WANTED cluded. Wladika, 256-7270 after 6. 79 PLYMOUTH Champ, 2-dr. custom, antenna, masts, assorted hardware. Van Deusen, 299-4328. \$195. Marder, 268-9643. RANCH OAK trundle-bunk-twin beds 38,000 miles, luggage rack, new tires, \$3995. Bolwahnn, 294-3475. HUMMEL plates & bells. Harvey, 265w/innerspring mattresses, \$250; 1/3 ACRE Siesta Hills corner lot on 3055 complete with maple bedroom set, 6-WHEEL, all terrain vehicle, \$500: Ridgecrest, mountain/city views, STUDENT w/pickup wants light GIRL'S 10-speed, \$50; executive desk, \$320. Cleveland, 298-0218. 78 Honda Express motorcycle, 50cc, underground utilities at curb, wood grain top, black steel w/ PICKUP CAMPER, 91/2' Tiltin Hiltin. hauling jobs. Bryan Fisher, 298-0526. street legal, licensed, \$350; shop chrome trim, \$175. Lutheran, 293-8364 or 822-1307. 35,000. Harvey, 265-3055. refrig., stove, oven, heater, portaheater, burns kerosene or diesel, 2 ACRES, Canyon Estates, mountain pottie, jacks, awning, hydraulic \$150. Hebron, 298-7771. land 6 miles east of city, \$20,000 SOFA & LOVE SEAT, \$100; king-size stabilizers, \$1800. VanDenAvyle, 898-SCHWINN Le Tour 10-speeds, over cash, will consider REC. Barr, 293mattress w/box springs & rails, 6474. \$180 ea. new, sell for \$90 ea. or \$160 for both. Curtis, 821-3522. 7542 \$75. Bolwahnn, 294-3475. ELECTRIC STOVE w/clock, timer & DESK, solid pecan, top 22"x48", \$135; 1/2 ACRE LOT Pinetop, Az., water, 3 drum end tables, 1 nightstand, 78 MOTORCYCLE, KE175, 2900 miles, sewer, elec., near recreation center, SHARE-A-RIDE \$25 ea. Whitham, 266-9313. timed oven, \$70. Cropp, 296-1877 \$630. Gronewald, 299-8682 after 5. 73 HONDA CB500K2 w/fairing & box, \$600; 75 Honda CB200T, \$300, cul-de-sac, large pines, cash or terms. Spatz, 299-0410. '80 MOBILE HOME, 14x76, 2-bdr., after 5:30. SEARS router, ¾ HP, case, carbide LAARS pool heater, 132,000 BTU, \$85; Rem. ADL 30-06, \$250; .22 bit, Pantograph, \$45. Hufnagel, 294-5949. den w/fp, dishwasher, refrig., gas range, \$1850 down to assume 1234 % both elec. start. Claybaugh, 299semi auto, \$55; single shot 410, MR. COFFEE, 8-cup, \$20; full bed-0721 after 5. SEATS available on Rio Rancho \$50. Liguori, 256-3613. spread, \$20; gold velvet swivel rocker, \$60; gold velvet wall-away 78 FIAT X19 4-spd., AM-FM cassette, loan. Roehrig, 281-2695. S.E.C.A. van: alternate, \$2.25/day; TWO matching chests of drawers, 3-BDR., 1¾ bath, extra lg. double garage. Burright, 299-7386 after 4. removable hard top, 32,000 miles, \$4000. Riley, 281-3507. regular status, \$41/month. Ost-5-drawers each. Palmer, 881-5165. recliner, \$180. Sanchez, 821-6391. Meyer, 892-5855.

#### **Coronado Club Activities**

### Win Weekend in Las Vegas

HAPPY HOUR TONIGHT sees special prices in effect all evening, the Country Showmen on the bandstand from 5 until midnight, and menu service in the dining room. Chef's specials tonight are beef ribs, \$4.75, and beef stroganoff with noodles, \$4.25. Included is the Club's outstanding soup and salad bar. Also, you have a new April club calendar-clip the box with your name and address label and use it for \$2.50 off your dining room tab.

VARIETY NIGHT TOMORROW features a Walt Disney movie, The Love Bug, about a car that is smarter than people. Pizza, hot dogs, hamburgers and French dip sandwiches are available starting at 5. The movie is at 6. Admission is 25 cents per person.

NEXT FRIDAY, April 9, Happy Hour features Frankie and the Corvettes on the bandstand from 5 until midnight. This group plays a variety selection, lots of country western, then at intermission the musicians change costumes, slick their hair and perform a '50s-type show. Happy Hour prices are in effect, and the dining room serves fine steaks and seafood plus a couple of chef's specials—beef ribs, \$4.75, and Swiss steak, \$4.50.

THE EASTER BUNNY will be at the Club on Saturday, April 10, about 9 a.m. for the Club's annual Easter Egg Roll. For children age 1-6 whose parents are members, the event is a fun affair with Easter egg hunts, chocolate bunnies, clowns, cartoons, candy treats and door prizes. Admission is 50 cents for each child.

HAPPY HOURS during the week include Mondays with 25-cent drinks for women, Tuesdays with special prices and a free spread of goodies at 5:30 and Wednesdays with three drinks for a dollar.

THURSDAY MOVIES on the giant TV screen are combined this month with a

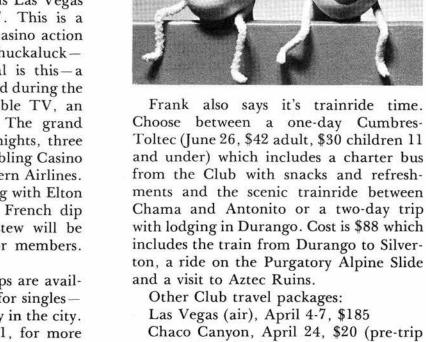
couple of bar promotions. On April 8, The Godfather is matched with a special Cuervo tequila promotion including special prices and drawings for hats and T-shirts. On Thursday, April 25, Blazing Saddles is the feature movie. Weller bourbon is the bar special April 22-more prizes (including cowboy hats) and the movie is Dirty Dozen.

THE BIG ONE this month is Las Vegas Night on Saturday, April 17. This is a repeat of the Club's popular casino action – craps, blackjack, poker, chuckaluck– with play money. The special is this-a number of drawings will be held during the evening to give away a portable TV, an AM/FM radio, toaster, etc. The grand prize is a free weekend (two nights, three days) at Sam's Town and Gambling Casino in Las Vegas, air fare by Western Airlines. The event also includes dancing with Elton Travis and the Westernaires. French dip sandwiches and green chili stew will be available. Admission is \$2 for members.

TENNIS CLUB memberships are available - \$40 for a family or \$32 for singles the best private tennis club buy in the city. Call the Club office, 265-6891, for more info.

DEADLINE is April 16 to enroll your kids in a Coronado Club-sponsored competitive swim team program. Call recreation manger Tom Lenz, 4-8486, right now.

TRAVEL DIRECTOR Frank Biggs (4231) says, "We have made the May 30-June 2 Las Vegas trip into a combined airplane-charter bus package. Go by bus for \$130 or by air for \$185. The bus option includes snacks, refreshments and a lunch while on board. The air option includes transfers and baggage handling at the hotel. Either way, you'll stay at the luxurious Maxim hotel."



MEET ME AT THE

CORONADO CLUB

SATURDAY, APRIL 10

MAP

KIDS EASTER EGG ROLL

YOU

MUST BE

CRACKED,

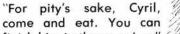
meeting April 22, 7 p.m.) Mazatlán, April 18-22 (\$345) or April 18-25 (\$420)

Cozumel, various weeks, \$459 before May 15, \$409 thereafter

See Frank in the lobby tonight between 5 and 7 p.m. for trip literature and travel talk.

### Favorite Old Photo







finish him in the morning."



When I look at the spaceman outfits that football players wear today, I'm reminded of this photo of my father, George O'Bryant, taken in 1910. That's him at right. He and his friend played "pro" ball in Alexandria, Indiana, wearing uniforms that consisted of a little padding on the thighs and helmets that were open on top. At 5 ft. 11 inches, Dad was one of the big men . . . a little different from your average pro tackle of today. (Mike O'Bryant—2458)

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